



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

RESEARCH

Middle Out Perspective to Drive Renewable Energy

In [‘Weaving an Innovation Network from the Middle-Out’](#), published in *Energy, Sustainability and Society*, authors Dr. Tali Zohar and Prof. Ofira Ayalon of the Department of Natural Resources and Environmental Management, explore the creation of renewable energy (RE) innovation ecosystems, crucial for combating climate change. The study emphasizes that effective innovation goes beyond traditional technology-push and market-pull approaches. The research analyzes Israel's ‘Eilat-Eilat Renewable Energy Initiative’ and demonstrates how middle actors drive the implementation of RE technologies, pulling decision-makers and others to promote a low-carbon transition.

Coral Rings Alarm for Climate Change

A team of researchers from The Leon H. Charney School of Marine Sciences, together with the Bioinformatics Services Unit, conducted a study published in *Frontiers in Marine Science* on corals in oxygen-deprived conditions. [While these corals manage to survive, they face](#)



‘Micro-plastic project’ by Hadar Weisberg, Roni Zada and Yaniv Cohen. The NB Haifa School of Design and Kayama Center student exhibition (Credit: The NB Haifa School of Design Facebook account)

[significant risks to future generations](#), including reduced prey ability, increased reliance on symbiotic algae, and decreased reproductive processes. The findings highlight the potential consequences of environmental changes, particularly those impacting coral-algae symbiosis and oxygen levels. Dr. Hagit Kvitt, the study leader, emphasizes the importance of understanding the implications of climate change for the future.

Unequal Impact of Climate Change and Communal Resilience

The Urban Climate Study published in *Urban Climate*, entitled [‘Multidimensional Hazards, Vulnerabilities, and Perceived Risks regarding Climate Change and Covid-19 at the City level’](#), by Prof. Maya Negev of the Faculty of Social Welfare and Health Sciences, together with Prof. Shlomit Paz and Dr. Motti Zohar of the School of Environmental Sciences examines climate threats in Haifa. It uses Geographic Information Systems

to map risks like heat waves, floods, and wildfires, considering social vulnerability. A survey of residents links perceptions of risk, danger, and resilience, with findings highlighting diverse hazards, varying vulnerabilities, and unequal distributions within the city, emphasizing the need for targeted infrastructure and community resilience efforts in different neighborhoods.

PUBLIC ENGAGEMENT

Israeli Committee for Climate Change

Given the urgency for national governments to act on climate change, and the responsibility of the Israeli academic community to advise the government on the subject, Prof. Shlomit Paz of the School of Environmental Sciences [joined the Israel Academy of Sciences and Humanities newly established Committee for Climate Change](#). The committee will convene top experts from all universities, to address pressing and future challenges, and will prepare for what lies ahead, and identify new areas for research.

The Dark Side of The Moon

The Division for Youth in Environment, Culture, and Science at the University of Haifa, held a [two-day workshop](#) including fascinating lectures from the University leading faculty members studying climate change, women in Aerospace and Astronomy and the secrets of the moon. Additionally, “Is it really

dark?” was a featured session that was a state-wide event for youth engaged in the subject.

LEARNING AND STUDENTS

Visually Communicating the Climate Crisis

This past year an [exhibition by third-year students majoring in visual communications from the WIZO Haifa Academic Center](#), which recently became part of the University of Haifa, in collaboration with Kayama Center for Social Innovation and Impact Entrepreneurship, displayed designs of students' work addressing the climate crisis. The exhibition was showcased at Haifa University's Rechter Gallery.

Impact Project: Combating the Urban Heat Island and protecting vulnerable populations in Haifa

An Impact Research Project that seeks to combat urban heat islands and protect vulnerable populations in Haifa. The multi-stakeholder group, including the University of Haifa, MATI Haifa, and CoVelocity aims to develop [local responses to the climate crisis](#) by conducting a Heat Vulnerability Assessment using scientific evidence provided by students, aspiring to improve the lives of the residents of Haifa, with an emphasis on vulnerable populations, through local innovation.

OPERATIONS

COP22 Events

To mark Global Climate Change week and the start of COP22, The Climate and Environmental Sustainability Center led a [day of events on campus which included TED talks by leading UofH faculty whose work focuses on sustainability](#).

Large Scale Maintenance Projects to Reduce Carbon Footprint

In efforts to reduce the University's carbon footprint, several large-scale maintenance projects took place on campus this year, such as transitioning to LED lighting, replacing old chillers with new chillers, and installing VRF air conditioning systems in the downtown campus.